REPORT OF ACTIVITIES OF THE DEPARTMENT OF WATER RESOURCES

by

Eric Koch, Chief
Flood Projects Office
Division of Flood Management
Department of Water Resources
The Resources Agency
State of California*

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WATER CONDITIONS

As of September 1, Water Year 2008 statewide hydrologic conditions were as follows: precipitation, 80 percent of average to date; runoff, 60 percent of average to date; and reservoir storage, 75 percent of average for the date. As of June 10, the date of the last forecast this water year, the projected median April-July runoff for the water supply basins ranged from 78% (Kings River) to 47% (Tule River). Sacramento River unimpaired runoff observed through August 31, 2008 was about 10.0 million acre-feet (MAF), which is about 54% of average. (On August 31, 2007, the observed Sacramento River unimpaired runoff through that date was also about 10.0 MAF or about 55% of average.)

On September 1, the Northern Sierra 8-station Index had a seasonal total of 34.8 inches, which is 71% of the seasonal average to date and 70% of an average Water Year (50.0"). Spring of 2008 has turned out to be extremely dry. For the 8-Station Index, the Water Year 2008 combined March through June total precipitation is only 3.4 inches, the driest on record (since 1921). The Water Year 2008, 8-Station Index, October through August total of 34.8 inches is the 16th driest year out of 88 years of record. The 2-year combined total precipitation for Water Years 2007 (37.2 inches) and 2008 (34.8 inches) is 72.0 inches, the 9th driest 2-year period on record.

January and early February brought significant amounts of precipitation to California, including heavy snowfall in the mountains. California's large water supply reservoirs received some inflow from these storms; however, the amounts were muted because much of the precipitation fell as snow. Because precipitation was significantly below average last year, dry hydrologic conditions prevail. Storage in most of the major water supply reservoirs is well below average. The Sacramento and San Joaquin Valley Water Year Type indexes are both forecasted to be "Critical."

Selected Cities Precipi	itation Accumulation as	of 09/01/2008 (Na	ational Weather Ser	vice Water Year	: July through June)
City	Jul 1 to Date 2007 - 2008 (in inches)	% Avg	Jul 1 to Date 2006 - 2007 (in inches)	% Avg	% Avg Jul 1 to Jun 30 2007 - 2008
Eureka	0.49	87	1.05	188	1
Redding	0.01	4	1.15	411	0
Sacramento	0.00	0	0.01	8	0
San Francisco	0.01	10	0.01	10	0
Fresno	0.01	50	0.02	100	0
Bakersfield	0.00	0	0.00	0	0
Los Angeles	0.00	0	0.00	0	0
San Diego	0.00	0	0.00	0	0

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Reservoir	River	Storage	Avg Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	1,259	1,834	69	2,448	51		1,189
Shasta Lake	Sacramento	1,566	2,959	53	4,552	34	-2,986	2,986
Lake Oroville	Feather	1,126	2,372	47	3,538	32	-2,412	2,412
New Bullards Bar Res	Yuba	566	651	87	966	59	-400	400
Folsom Lake	American	299	618	48	977	31	-678	678
New Melones Res	Stanislaus	1,130	1,373	82	2,420	47	-1,290	1,290
Don Pedro Res	Tuolumne	1,109	1,425	78	2,030	55	-921	921
Lake McClure	Merced	318	560	57	1,025	31	-701	707
Millerton Lake	San Joaquin	227	228	99	520	44	-293	293
Pine Flat Res	Kings	127	385	33	1,000	13	-873	873
Isabella	Kern	143	211	68	568	25	-286	425
San Luis Res	(Offstream)	270	891	30	2,039	13		1,769

The latest National Weather Service Climate Prediction Center (CPC) long-range weather outlook for September 2008, issued August 31, 2008, forecasts below average precipitation for Northern and Central California, and average precipitation for Southern California.

FLOOD PROJECT DEVELOPMENT BRANCH

PROJECTS AND STUDIES TO IMPROVE FLOOD PROTECTION FOR SACRAMENTO

Joint Federal Project at Folsom

Progress on the Folsom Dam Modifications Project (also known as the Folsom Dam Joint Federal Project) continues. In particular:

- The Bureau of Reclamation reports that the contract for Phase 1
 excavation of the spillway is nearly complete. Procurement of a Phase 2
 excavation contract is on schedule for September.
- The U. S. Army Corps of Engineers (Corps) is concentrating their efforts on completing the design of the control structure. Construction of the control structure is scheduled to begin in 2010.
- The Corps continues to evaluate methodologies by which the control structure approach channel can be constructed to minimize construction risk and cost. Under consideration are various types of cofferdams for constructing the channel in the dry, and various methods of constructing the channel in the wet.
- Negotiations are underway to modify the Board's existing Project Cooperation Agreement with the Corps and SAFCA.

While there is an enormous amount of work left to accomplish, the project partners continue to work together to eliminate obstacles as fast as they arise. The project is on schedule for completion around the year 2015.

Folsom Dam Raise

Work on the Folsom Dam Raise Element of the project is temporarily on hold until significant progress is made on construction of the auxiliary spillway. Design efforts are estimated to resume in 2011.

American River Common Features Project

The American River Common Features Project continues to improve the levee system along the American and Sacramento Rivers in Sacramento. Current activities by key project elements are:

- Design for closing gaps in the slurry wall left at the locations of deep utility crossings or other major infrastructure in the 24 miles of slurry wall along the American River levees continues. The design for the R4 site is complete and construction is planned for June 2009. These repairs are commonly referred to as the WRDA 1996 Remaining Sites work.
- Raising of 4,300 feet of levee in the Mayhew Drain area and installation of cut-off wall and a closure structure on the Mayhew Drain is well under way.
 Due to issues encountered during cut-off wall installation, it was necessary to postpone construction of the closure structure to 2009 construction season.
 This work was authorized by WRDA 1999.
- Design for raising and widening three levee sections at Jacob Lane, Howe Avenue, and Highway 160 is underway. The design for Jacob Lane is complete and has been approved by the Central Valley Flood Protection Board; construction is planned from September to October 2008. This work was authorized by WRDA 1999 and commonly referred to as the North Area Contracts work.
- Planning activities for the preparation of the General Re-Evaluation Report is progressing according to schedule and is expecting to have a F3 conference in January 2009.

Emergency Levee Repair at RM 75.1, Sacramento River

An emergency repair project at the Pritchard's Lake pump station on the east levee bank (River Mile 75.1) of the Sacramento River is currently under construction (Permit 18112-Rev GM) and is scheduled to be complete in early October. During excavation unknown structures were encountered and corrective measures have been formulated and are currently being implemented. The project is currently on schedule and within budget. This work has not been authorized by Congress. The Board has requested Section 104 credit from the Corps.

South Sacramento County Streams Project

The South Sacramento County Streams Project will provide increased flood protection for the south area of Sacramento

- Construction along Elder and Florin Creeks between Franklin Blvd and Morrison Creek will continue into the fall.
- Construction began along Unionhouse Creek west of Franklin Blvd.
- Design for future flood control features along Unionhouse Creek has been initiated. The contract to complete design should be awarded in the early fall.

PROJECTS AND STUDIES TO IMPROVE FLOOD PROTECTION FOR OTHER URBAN AREAS

West Sacramento Project

- Geotechnical analysis for the repair of the two levee slips is near completion. After analysis is complete, design and construction will follow and is tentatively scheduled for contracting in March 2009.
- A PCA amendment has been approved by the Board, has been negotiated with the Corps and the Local Sponsors and is currently being processed for execution.
- The Corps has decided that a General Re-evaluation Report for future work to provide 200-year level of protection for the area will need to be produced. The Project Management Plan (PMP) for the report is currently being developed by the Corps. The draft PMP is scheduled to be distributed for review early September, 2008.

Yuba River Basin Project

- General re-evaluation of the Yuba River Basin Project continues. The F4 conference was held May 29 th, where it was concluded that there is a Federal interest in a multi-purpose project that strengthens levees inplace, provides setback levees, and restores river floodplains for both ecosystem restoration and flood risk management.
- The Marysville Ring Levee Improvement is a separable element of the Yuba River Basin Project. Authorization to initiate design and construction simultaneously with the GRR is underway. Once completed, Marysville will be afforded a high level of protection significantly sooner than originally scheduled. The Corps proposes to award a contract for design in 2008 and expects execution of a Project Cooperation Agreement with The Central Valley Flood Protection Board to commence construction of the Ring Levee repairs in Fall 2009.

Sutter County Feasibility Study

The Corps and the Non Federal partners are working to refine the scope of the Feasibility Study. The Corps, State, and Sutter-Butte Flood Control Agency are working closely to develop a new Feasibility Cost Sharing Agreement.

Lower Cache Creek, Woodland Area Feasibility Study

The Corps is exploring the reformulation of alternatives and scoping for a new Feasibility Study for this project. Scoping meetings are planned for Spring-Summer of 2008. The Corps estimates that the new Feasibility Study will be complete in 2011 with design of a selected alternative to commence in 2012.

Lower San Joaquin River Feasibility Study

Representatives from San Joaquin County, San Joaquin Area Flood Control Agency (SJAFCA), CVFPB, Corps, and other local interests have worked together to prepare a Project Management Plan (PMP), a draft Feasibility Cost Sharing Agreement (FCSA) and a draft Local Feasibility Cost Sharing Agreement (LFCSA). The PMP and the FCSA are currently being reviewed by the Corps. The approval of these two documents and the LFCSA is scheduled to be completed expeditiously so that the study can be initiated at the beginning of the Federal 2009 fiscal year. The cost estimate for the study is \$10.2 million.

West Stanislaus Orestimba Feasibility Study

The project area is located in western Stanislaus County, California, including the city of Newman. Investigations are to analyze potential solutions for flood damage reduction, ecosystem restoration, and related purposes for Orestimba Creek.

- The hydraulic modeling of channel improvements for Orestimba Creek alternatives is nearly complete.
- The Corps is currently developing costs, B/C ratios and an NED plan.

Mid-Valley Area Levee Reconstruction Project

The Mid-Valley Reconstruction Project sites extend from the Tisdale Bypass to the Sacramento Bypass and include levees of the Sacramento River, Feather River, Yolo and Sutter Bypasses, and Knights Landing Ridge Cut. Project partners include the Corps, the CVFPB, and seven local agencies and Counties.

Currently a Limited Reevaluation Report (LRR) and associated environmental documents are being revised by the Corps for approval in 2009. Construction contracts for an additional 12 miles of levee upgrades could go out in Fall 2009 with construction following in 2010, if the LRR is approved.

Other significant developments

Butte County is unable to cost share the Rock Creek/Keefer Slough Feasibility Study in this fiscal year due to the County's financial difficulties.

FLOOD PROJECT MODIFICATIONS & PERMITS BRANCH

Early Implementation Program

Three Rivers Levee Improvement Authority (TRLIA) continues construction on all three segments of the Phase 4 Feather River Levee Improvement Project. TRLIA received their second quarterly payment for work continuing in July 2008 in the amount of \$14.38 million. Recent progress includes:

Segment 1 - All soil bentonite wall work has been completed in this segment. Construction of the waterside blanket is complete at site 7 from Sta. 74+00 to 104+00 and is in progress from Sta. 182+00 to 199+00. Relief well pilot hole drilling is in progress. Installation of the permanent clay cap has begun from Sta. 220+00 to 246+80.

Segment 2 - Clearing and grubbing of the levee foot print is nearing completion and levee foundation work is in progress from Sta. 21+00 to 75+00. The soil bentonite cut-off wall work continues with positive results at three headings. Some equipment malfunctions have occurred making for slow progress, however, the project remains on schedule. Earthwork has begun on building the levee itself and the first portions of the levee are beginning to take shape with much progress expected to made in the next month.

Segment 3 - Clearing activities for a seepage berm continue in this area. A fire over the Labor Day weekend burned all the barrier fencing and some Elderberry shrubs located along the edge of the fencing. The fire was unrelated to the construction activities.

Sacramento Area Flood Control Agency (SAFCA) completed the Phase 1 portion of project Reaches 1 and 2 in 2007 for the Natomas Cross Canal (NCC) component of the Natomas Levee Improvement Project. Phase 1B is currently under construction, the excavation and backfill of the soil bentonite slurry cut-off wall has been completed between Sta. 97+00 and 61+00 and Sta. 47+75 to Sta. 58+00. Review of contractor's reports and data shows all work to be according to contract specifications. Levee embankment construction is scheduled to begin shortly. SAFCA submitted its real estate plan and first round of credit invoices and received their first payment in the amount of \$4.74 million. The remaining credit invoices are expected in October or November 2008.

Levee District No. 1 of Sutter County (LD1) Engineering plans are nearing completion, with final design expected by the end of September. LD1 expects to submit a quarterly work plan and request for credit shortly. Real estate acquisition negotiations continue with the land owners. However, three parcels, including the largest parcel, will most likely require condemnation with the court rendering the final price decision. LD1 continues negotiations with the U.S. Army Corps of Engineering (Corps) regarding environmental concerns. The construction of the setback levee is not scheduled to start until April 2009. No State cost-share funds have been paid to date.

Reclamation District No. 2103 (RD 2103) RD 2103 had previously submitted a request for credit and a quarterly work plan advance in July 2008, and DWR paid funds in the amount of \$4.68 million. However, due to a shortage of bentonite material, the need to formulate a plan to do construction in an area containing a previously unidentified DWR critical erosion mitigation site on the west side of the State Route 65 site, and permitting delays associated with erosion sites in railroad right of way, RD 2103 is requesting that the scope of work for Fiscal Year 08-09 be reduced to 3,700 feet of slurry wall west of State Route 65, Sta. 410+50 to 451+00. The remainder of the work, and completion of the project, would then occur in the Fiscal Year 09-10 construction season. RD 2103 will be submitting a revised schedule and scope of work which the State will take into consideration in making its decision allowing the schedule to slip.

Despite the issue identified above, the project continues to move forward and the construction contract was awarded to Nordic Industries on August 4, 2008. Mobilization has begun and slurry wall construction is imminent.

Project funding for the four Early Implementation Program projects are:

- Three Rivers Levee Improvement Authority: Feather River Levee Improvement Project Total cost: \$191.4 million, estimated maximum State cost share: \$138.5 million. State share paid to date: \$54.65 million
- <u>Sacramento Area Flood Control Agency</u>: Natomas Levee Improvement Program (NLIP) Early Start Program – Total NLIP cost \$223.5 million; total cost of Natomas Cross Canal South Levee element of NLIP: \$73.4 million; estimated maximum State cost share: \$49 million. State share paid to date: \$4.74 million.
- <u>Levee District No. 1 of Sutter County</u>: Lower Feather River Setback
 Levee at Star Bend Total cost: \$20.78 million, estimated maximum State cost share: \$16.33 million. State share paid to date: none
- Reclamation District No. 2103: Bear River North Levee Rehabilitation Project Total cost: \$14.7 million, estimated maximum State cost share: \$7.35 million. State share paid to date: \$4.68 million.

Local Levee Urgent Repair Program Local Levee Evaluation Program

In addition to the Early Implementation Projects, the Branch is implementing these two programs for the non-federal levees. These are Statewide competitive programs (excluding the Sacramento/San Joaquin Delta, which is covered by other programs) to provide State cost share funding to local agencies for projects to evaluate and make urgent repairs to non-federal levees, especially those at risk of FEMA decertification.

Staff received 21 grant applications. Six applications were submitted for the Local Levee Urgent Repair Program totaling \$18,535,000 of the \$40 million available. Fifteen applications were submitted for the Local Levee Evaluation Program totaling \$3,688,000 of the \$20 million available. Two of the LLUR applications have been termed as outwardly not qualified (new construction of facilities; not repairs) per Guidelines and letters have been sent to applicants. Two additional LLUR applications are also considered to be not ready for construction in the time frame set by the Guidelines and letters will be sent. The amount under consideration is now \$5,000,000 of the \$40 million available with the sole applicant for LLUR being Orange County Flood Control District.

DWR staff has sent a letter to Alameda County discussing their request for payment of work already completed. The Guidelines do not allow payment for work completed prior to signing of a funding agreement between DWR and the applicant.

The remaining applications have been submitted to the review teams for their assessment and their responses are expected by the end of September.

MAINTENANCE SUPPORT BRANCH

Sutter Bypass Vegetation Management

This year was particularly challenging for our Maintenance Yard crews because of delays in accessing California Conservation Corps and California Department of Forestry crews. This has resulted in the Sutter Maintenance Yard crews not beginning their work in the Sutter Bypass until mid-August. As of the first week in August, they have been clearing some of the more heavily vegetated areas. They have cleared and shredded 10 acres of berry vines, willows and lower branches on mature trees in and near a duck club and plan on clearing another 10 acres in that area before the beginning of flood season. There is another area of heavy vegetation north of the duck club where they also plan to clear an additional 10 acres before flood season. Next year, crews will be scheduled to clear 20 additional acres in each of these areas. The "Old Growth" area near the Tisdale Bypass is another area of vegetation and 15 acres has been cleared and 25 acres dozed by the USFWS. All of this clearing is in addition to the normal vegetation management in the Bypass that included discing 90 acres at the Butte Slough Wildlife Refuge, mowing 30 acres at the Long Bridge near Highway 20, and hand spraying 12 acres within the Sutter Bypass.

Maintenance Area 9 Pipeline Abandonment

The Central Valley Flood Protection Board requested DWR during their October 19th, 2007 meeting to abandon a pipeline owned by M&H Realty Partners by way of Board Order 07-01. This order was issued in response to the owner not complying with their inspection or maintenance requirements in accordance with their permit conditions. During late August DWR contracted with CalSierra Construction, Inc. to perform a video inspection of the pipeline. Approximately 152 feet of pipeline was inspected and no cracks were evident. A grout plug was placed in last 60 feet of the waterside end of the pipeine. Once a budget is signed and additional grout is procured, the remainder of the pipeline will be backfilled in accordance with Section 124(c) of Division 1, Title 23 of California Code of Regulations.

FLOOD OPERATIONS BRANCH

Joint State-Federal Operations Center Section (FOC) is involved in the following:

- The FOC has added two new staff, Elizabeth Bryson and Wendy Stewart. The FOC is now fully staffed with 3 engineers and 1 research analyst.
- The FOC continues to facilitate and coordinate conference calls on a
 weekly basis with county officials, the Governor's Office of Emergency
 Services (OES), CalTrans and other State and federal entities to obtain
 updates on the current status on the Inyo County mud/debris flow.
- FOC staff is working closely with the U.S. Army Corps of Engineers, the National Weather Service, OES, and other State agencies to plan and schedule pre-season meetings both in Southern California and Northern California. The schedule for Southern California is as follows:

September 16, 2008 Ventura Co. Watershed Protection District 11251-B Riverbank Dr. Ventura, CA 93004

September 17, 2008 Riverside Co. Flood Control Office 1995 Market Street Riverside, CA 92501

September 18, 2008 San Diego Co. Dept of Public Works 555 Overland Ave., Bldg #19 San Diego, CA 92123 The tentative schedule for Northern California is as follows:

October 8 - Red Bluff
October 9 - Yuba City
October 15 - Sacramento
October 16 - Stockton
October 22 - Eureka
October 23 - Napa

- Currently, FOC staff is reviewing the Calaveras County Water District
 Multi-Hazard Mitigation Plan as a potential example for creating/drafting a
 sample safety plan that can be use by the Department under the
 requirements of AB 156. Once a template safety plan is in place, a draft
 fact sheet will be finalized and distributed to areas that meet the AB 156
 requirements.
- The FOC Chief and staff, with NWS representative, Cindy Matthews have been visiting the County OES offices that have forecast points and/or are listed on the high water notification sheets. The purpose of the meetings is to update the county OES offices with the changes in the FOC and to open lines of communication that may have been lost in recent years. Currently, the FOC/NWS representatives have visited 8 of the planned 16 county OES offices.
- Training sessions are planned to start late September or Early October and continue indefinitely until all Flood Operations Branch staff are trained in SEMS/NIMS.

Decision Support Section

The section provides support to the FOC to prepare the annual Directory of Flood Officials for publication. The section provides support to Hydrology Branch staff to prepare the Flood Operations Center for conducting classes in RES-SIM, DSSVUE, and other HEC tools.

Local Emergency Preparedness and Response Section

Currently staff is working on a Delta specific work group; which will include DWR, the OES, USACE, district representatives, and the 5 County OES to assist in the preparation of a Delta Emergency Operations Plan.

Staff is continuing to work on the Delta Interim Emergency Operations Plan. The plan will be out for public circulation October 2008.

Emergency Response and Security Section

In preparation for the upcoming flood season, the Chiefs of the FOC SEMS sections are meeting to discuss rosters, training schedules and other items as needed. As the roster is updated, additional training will be scheduled for those who require it.

The Section is currently establishing training opportunities for members of the Incident Command Teams (ICT) to learn the operation of the Department's communication trailers for use in the field during deployment. Training exercises are being planned to test the revised Delta EOP and provide experience for the FOC and ICTs staff members.

Rick Burnett, our Flood Fight Specialist, is currently scheduling classes for Flood Fight Methods and will begin to incorporate the new training material that has been produced over the last year into the class.

Currently staff is examining the new draft State Emergency Plan to identify how the changes will need to be incorporated in the Department's response methodology.

The section has been assisting the Governor's Office of Emergency Services in the new State Emergency Assessment Teams (SEAT) process providing technical assessments for team deployments.

Flood System Analysis Section

The section is working with the Flood Project Integrity and Inspection Branch to develop a vulnerability assessment; which will provide information on existing conditions and past performance, engineering evaluations, and operations of the State-Federal flood control system. Staff is in the process of developing tools that will utilize all data being collected by the Department (related to the flood control system) and will use a majority of the data gathered to assess and rate the system to identify weak points and make recommendation to enhance the current system.

FLOOD PROJECT INTEGRITY AND INSPECTION BRANCH

In August 2008, land-based erosion surveys were conducted in RD 2064, RD 2075, Lower San Joaquin Levee District, Madera County and Merced Stream Group. Initial observations made on the documented erosion sites found no significant physical changes and no new erosion sites were discovered. The last set of land-based surveys will be conducted in RD 2058 and RD 2095. The remaining previously documented erosion sites will be inspected by boat.

- The fall 2008 levee inspections will begin September 9 and will be completed by November 30. The newly developed database inspection program with integrated GPS entries will be used following its successful full-scale testing in the spring 2008 inspection cycle.
- The inspections will be performed using DWR's interim inspection criteria and overall rating methodology that were first used for the fall 2007 inspection. Overall ratings will be calculated as they were in the fall 2007, using the percentage of a district's overall levee mileage that is rated unacceptable or minimally acceptable.
- The 2008 Channels and Structures inspection reports are nearly complete and will be released by September 30. Project pumping plants will be inspected in September as well and included with the Structures report.
- Database development is underway to distribute fall inspection results immediately upon completion via email to each district with email capability.
 Mailing of hard copies will be necessary to those districts without email capability or to all districts if the database development is delayed.
- At the completion of the inspection cycle, the inspection results will be presented to the Flood Protection Board and the Corps of Engineers.

FLOODPLAIN MANAGEMENT BRANCH

Senate Bill 5 Building Codes

The Building Codes Project Technical Advisory Committee met on August 28 and discussed the legislative requirements, code adoption process and six building code provisions under consideration. The next meeting of the TAC will be in early October. Meeting notes from the first TAC meeting are available. Dan Fua is representing the Central Valley Flood Protection Board.

Senate Bill 5- Best Available Maps and Data

A CD containing the "best available" 100-year and 200-year floodplain maps was mailed to 132 cities and counties in the Central Valley on August 29. The press release is scheduled for distribution on September 11, along with the opening of the website containing the "best available maps."

LEVEE EVALUATIONS BRANCH

The Levee Evaluations Branch was created to perform geotechnical levee evaluations on about 350 miles of urban levees. An urban levee is defined as protecting at least 10,000 people. The geotechnical levee evaluations will focus on the urban project levees in geographic areas of Reclamation District (RD) 17, RD 404, Natomas, West Sacramento, Marysville, Woodland, Davis, Stockton, MA9, American River, Sacramento, the Sutter Basin, and RD 784. This program is in the process of expanding to other areas within the Sacramento and San Joaquin Flood Control Projects with the Bond funding.

The purpose of these evaluations is to assist in developing a levee certification program based on geotechnical data, provide consistent formats for data (and associated data exchange), and provide an evaluation of the levee system based on geotechnical data. This evaluation will be conducted with the goal of providing 200-year level of protection in urban areas and the design profile level of protection in rural areas using the U.S. Army Corps of Engineers (Corps) underseepage criteria.

General

- The Levee Evaluations Branch continues to work closely with RD 17, Natomas (SAFCA and RD 1000), Three Rivers, West Sacramento, and others within the Department and the Corps to review issues concerning early implementation projects.
- Weekly coordination meetings with the Corps continue so that subsurface explorations plans are approved in advance of work and efforts are not duplicated.
- 3. The tenth Independent Consulting Board Meeting concerning levee evaluations will be held in September, 2008.

The work performed in August is broken into three geographic urban levee areas of North, Central, and South is as follows:

North Urban

- Sutter Basin: The Corps is still reviewing the Draft Phase 1 Geotechnical Evaluation Report (P1GER). Additional supplemental explorations commenced on July 21, 2008 and will continue through September 2008.
- Marysville: The final P1GER was received in August 2008 and will be distributed to local stakeholders. Work on the draft Supplemental Geotechnical Data Report (SGDR) is continuing and should be completed in September 2008.

3. RD784: The draft Supplemental Subsurface Investigation Work Plan was delivered by URS to DWR and is undergoing an internal QA/QC process and Corps review.

Central Urban

- West Sacramento: The final Phase 1 Geotechnical Data Report (P1GDR)
 was delivered to DWR in August. The draft Supplemental Geotechnical Data
 Report (SGDR) for West Sacramento is underway and is expected to be
 delivered to DWR in September 2008.
- 2. Sacramento River: The draft P1GER for Sacramento River east bank levees is underway and expected to be delivered to DWR in September 2008.
- 3. NEMDC: The final P1GDR report for NEMDC-East levees is expected to be delivered to DWR in September 2008. The final P1GDR report for NEMDC-West levees is expected to be delivered to DWR in September 2008. Several planning meetings and design workshops were conducted with the Corps, DWR, SAFCA, and stakeholders regarding the remediation of the levee system in Natomas. Review of the extensive geotechnical information for the remaining areas is underway. A draft P1GER for NEMDC-West levees is currently underway and will incorporate SAFCA's most current field investigations prior to its release to DWR in September 2008.
- 4. American River: Field explorations and piezometer installations along the American River levees were completed in August 2008. There were a relatively limited number of explorations and piezometer installations due to the existence of cutoff walls already constructed along a significant portion of the American River levees. A draft SGDR for the American River levees is underway and is expected to be delivered to DWR in September 2008.
- 5. Davis: The project schedule will not be significantly altered to expedite field work for late summer/early fall this year as mentioned in last month's update. This is to avoid sensitive species windows. Comments to the draft P1GDR have been submitted to URS and revisions are in progress. The draft P1GER is currently being prepared.
- Woodland: The final Technical Review Memorandum is scheduled for delivery in August 2008. A draft of the fluvial geomorphology study for the Cache Creek section of levee/channel between the I-5 Bridge and the Cache Creek Settling Basin is being prepared, and is scheduled for delivery in September 2008.

South Urban

 SJAFCA: The Draft Phase 1 Geotechnical Evaluation Report (P1GER) for the Calaveras River Drainage was delivered to DWR in August, 2008. This report is undergoing an internal DWR QA/QC process and USACE review.

- 2. The report will then be updated for local stakeholder release in October 2008. Piezometers were developed in August 2008 and in-situ permeability tests are underway.
- 3. RD 404: The Draft Phase 1 Geotechnical Data Report (P1GDR) for RD 404 has been reviewed by DWR and USACE. This report is currently being finalized based on the DWR QA/QC and USACE review. The final P1GDR is expected to be received by DWR and released to local stakeholders in September. Phase 1 analysis is currently being performed. The Draft P1GER is underway.
- 4. RD 17: Supplemental field explorations were recently completed in RD 17. Laboratory testing of the collected data is being performed. The Draft Supplemental Geotechnical Data Report (SGDR) for RD 17 is underway.
- Greater Stockton Area Non-Project Levees: Data collection and geomorphology are underway in this area. In September, DWR will meet with local stakeholders and SJAFCA in Stockton for the first coordination meeting and briefing of planned activities.

NON-URBAN LEVEE EVALUATIONS BRANCH

The Non-urban Levee Evaluations Branch was created to perform geotechnical levee evaluations on about 1,250 miles of non-urban State/Federal project levees. A non-urban levee is defined as protecting 10,000 or less people. The geotechnical levee evaluations will focus on the non-urban State/Federal project levees in the Sacramento River and the San Joaquin River flood control systems. This project is in the process of expanding to include the appurtenant non-project levees; these are non-project levees that provide protection to the same levee systems that non-urban project levees do.

The purpose of these evaluations is to support the Central Valley Flood Protection Plan (CVFPP) and other flood management related programs by determining if these levees meet defined geotechnical criteria and, if appropriate, identify remedial measure(s) to meet those criteria. This evaluation will be conducted with the goal of providing the design profile level of protection in non-urban areas using the DWR and the U.S. Army Corps of Engineers (Corps) levee design criteria.

Activities in August:

- 1. The non-urban Levee Evaluation project purpose and needs development continued; a final draft is in review by the executive team.
- 2. A project management plan is under development.

- 3. A notice to proceed was issued for geomorphology task orders.
- 4. Data collection needs for the levee evaluation are being coordinated with the needs of Central Valley Floodplain Evaluation and Delineation (CVFED) and Central Valley Flood Protection Plan (CVFPP) to minimize duplicate efforts. An outreach plan, covering all three projects, is also being developed by the CVFPP.

LEVEE REPAIRS BRANCH

Sacramento River Bank Protection Project (SRBPP)

The Corps issued Notices to Proceed for repairs of seven out of eight sites. All Reclamation Districts (RD) where repair work is being done have signed Local Cooperation Agreements for operation and maintenance of these sites after construction. Arrangements for awarding contract for RD 501 repairs at Steamboat Slough 16.6R are in progress.

For 2009 construction, Corps consultants are working on designs for 14 sites and DWR is responsible for design and construction of six sites. There are no encroachment issues on these 20 sites. However, there are additional five sites; Sac16.8L, 42.7R, 55.2L, 77.2L and Feather 28.5R Corps would like to repair in 2009 depending upon resolution of encroachment issues by DWR Real Estate.

San Joaquin River Flood Protection Project

Repairs of three critical sites; San Joaquin River Mile 42.3R, Paradise Cut Levee Mile 3.8L and Mormon Slough Levee Mile 11.8R, are in progress. The Paradise Cut site requires off-site mitigation for Brush Rabbit and negotiations with U.S. Fish and Wildlife Service are continuing to provide this mitigation.

DWR field reconnaissance has identified additional 8 sites needing repairs. Preliminary design work for these sites is in progress.

2006 Public Law (PL) 84-99 Rehabilitation Assistance Program

In all, there are 22 Order 2 and 139 Orders 3, 4 and 5 remaining flood damage sites needing repairs. Construction contracts for 81 sites have been issued. Awards for the remaining sites are being negotiated.

Repair work on the Lower San Joaquin Levee District Chowchilla Bypass 10 sites consisting of left bank Slurry Wall Project and the right bank seepage berms, is in progress. DWR is paying \$4.97 million out of a total of \$19.0 million being spent by the Corps to repairs Lower San Joaquin District sites.

The Corps is lead agency for PL84-99 repairs and DWR is providing environmental permitting, rights-of-way and borrow materials for these sites.

UPDATE ON DWR IMPLEMENTATION OF AB 156

AB 156 Local Agency Reporting Program September 2, 2008 Status Update

Safety Plan

The Flood Center is working to satisfy the requirements of the recently enacted legislation. AB156 requires communities with 1000 or more persons that are surrounded by levees to adopt a "safety plan" in case of flooding for its citizens. Presently, many communities subject to flooding risks from the four representative types of flood hazards detailed by the Flood Center do not posses safety plans for its citizens. Four specifically identified types of flood hazard include (see attached map):

- Alluvial Fan flooding
- Banked River and Headwater Region flooding
- Coastal and Tidal Estuary flooding
- Deep Floodplains prone to seasonal flooding

The Flood Center is establishing new and reaffirming existing relationships with local emergency responders who face these threats daily. Incorporating flood emergency response plans and/or "safety plans" into local emergency operation plans is a way of reducing the threat to the local populations and complying with AB156. Towards this end, Flood Center staff is pursuing a mapping effort that will identify every community with 1000 persons or greater that is protected by levees. The Flood Center is gathering information from many different sources but is working most closely with existing OES data and maps to identify each community at risk.

Additionally, the Flood Center is pursuing a "pilot project" for each of the flood hazard types identified above. Each of these pilot projects will identify the unique hazards faced by each community within these particular regions. The pilot projects will determine the best practices for flood preparedness and flood response for each community greater than 1000 persons protected by a levee system. The aim of this project is to document and demonstrate preparedness and response approaches that will help at-risk communities throughout California. A gap analysis of the local existing preparedness and response plans, if they exist at all, will be performed and a new preparedness and response plan that addresses the gaps for each of the pilot communities will be written.

Ultimately, performing a gap analyses for each community and crafting both augmented and new preparedness and response plans will allow Flood Center staff, in conjunction with DWR's legal office, to develop model ordinances for atrisk communities subject to AB156. These model ordinances will reflect the unique risks faced by each community and act as templates that at-risk communities can access to write their own preparedness and response plans. Model ordinances are anticipated to be completed June, 2009.

REDDING
Suisun
Marsh
Dalla
SAN FRANCISCO

Example Locations of Local Flood Hazards

- (A) Alluvial Fan
- B Banked Rivers / Headwater Regions
- © Coastal / Tidal Estuary
- Deep Floodplain

CIS ANGELES

SAN DIEGO

MEXICO

Local Agency Reporting Program

The Local Agency Reporting Program was developed in response to additions to the Water Code resulting from Assembly Bill 156. These additions require Local Agencies that; maintain Project Levees, or Non-Project Levees that also benefit land within the boundaries of an area benefited by a Project Levee, to submit five categories of levee performance, condition and maintenance information annually to the Department. In turn, the Department is required to compile this information, and provide a consolidated report annually to the Central Valley Flood Protection Board (CVFPB). Program reporting timelines are summarized below:

Water Code changes become effective:

Local Agency reports to DWR:

DWR consolidated report to CVFPB:

July 1, 2008

Due September 30 each year Due December 31, 2008, updated

annually

Program Roll-out was initiated with the development of a Fact Sheet, which was mailed to all Local Agencies (and Agency representatives) subject to the new requirements. This was followed by a series of public presentations including a presentation to the San Joaquin County Technical Advisory Council and at four locations throughout the Central Valley as part of the FloodSAFE Strategic Plan Outreach effort. At the presentations, FPIIB solicited input from the Local Agencies on program development, and offered to meet with any Local Agency that wished to discuss reporting issues or ideas.

Meanwhile, FPIIB has been working in close coordination with CDEC staff to develop a graphical interface user application which would allow Local Agencies to establish individual user accounts with access to certain DFM flood system information and the ability to submit required information electronically. This application will also facilitate consolidation of the information.

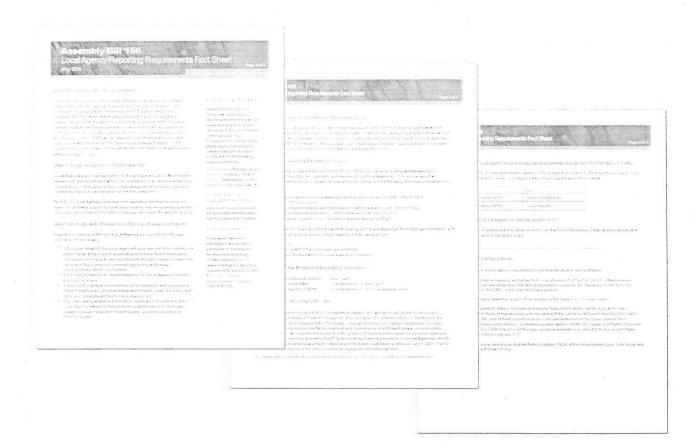
Individual meetings were requested by San Joaquin County Flood Control, and the California Central Valley Flood Control Association. FPIIB met with these agencies to answer questions and solicit feedback on the program. Subsequently, FPIIB hosted a series of workshops on August 13 and 14 to receive feedback from Local Agencies on the new electronic web application developed in partnership with CDEC.

Overall, Local Agencies were initially skeptical of an 'additional' unfunded reporting mandate. However, the response to the proposed information sharing concept has been positive. The Local Agencies have demonstrated a great interest in access to flood system information, including levee inspection reports, encroachment information, operation and maintenance manuals, and a platform for consolidated reporting requirements.

Communication & Outreach

Fact Sheet

In May 2008, a three page Fact Sheet was mailed to the Local Agencies describing the new program and reporting requirements was mailed to all Local Agencies.



Public Presentations

Presentation of the new reporting requirements were provided at the following venues on these dates and times:

Venue	Location	Date
San Joaquin County TAC	Stockton	May 28, 2008
FloodSAFE Outreach	Sacramento	June 9, 2009
FloodSAFE Outreach	Clovis	June 19, 2008
FloodSAFE Outreach	Chico	June 25, 2008
FloodSAFE Outreach	Stockton	June 26, 2008

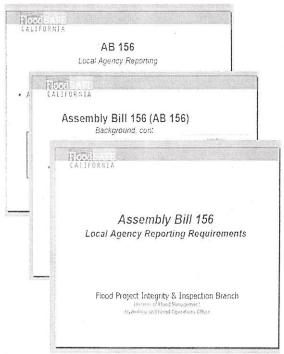
Local Agency Meetings

At their request, FPIIB staff met with Local Agencies on the following dates:

Agency	Date
San Joaquin County Flood Control	July 9, 2008
CA Central Valley Flood Control Association	July 9, 2008

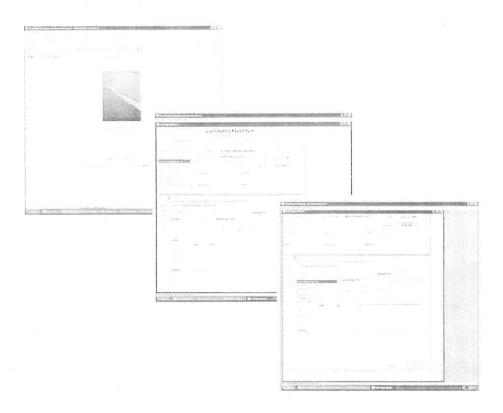
Web Application Workshops

FPIIB hosted a series of workshops (four repeat sessions) on feedback from Local Agencies on the new electronic web application developed in partnership with CDEC.



Electronic Reporting-Initial Web Application Development

CDEC staff have developed a graphical user interface application which will allow Local Agencies to establish an individual user account, with access to certain DFM flood system information and the ability to submit required information electronically.



Folder Mail Out

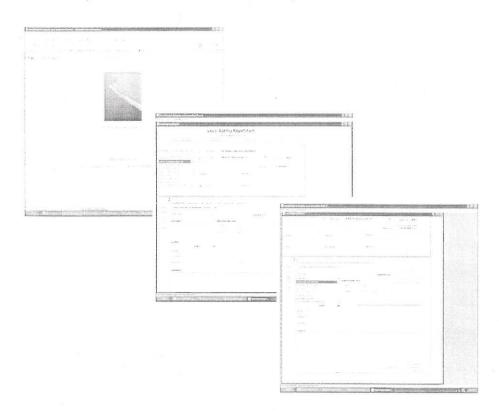
FPIIB developed a hardcopy reporting option and mailed out instructional folders explaining the new reporting requirements to all local maintaining agencies the week of August 25, 2008.

Next Steps

- Establish Local Agency user accounts
- Develop electronic attachment submission capability
- Acquire additional server file space
- Develop menu for user applications- inspection reports, maps, O&M manuals
- Develop Department summary report template
- Develop LMA GIS Maps, and summary contact information for viewing and editing

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